

**Crumpled Graphene**

1,2, 1,2, 1,2, 1, 1,2,\*  
 1 ; 2  
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(Dye-sensitized solar cell; DSSC)

DSSC 가 TiO<sub>2</sub> Pt , I<sup>-</sup>/I<sup>3-</sup>  
 DSSC TiO<sub>2</sub> 가 , DSSC  
 TiO<sub>2</sub> 가 ,  
 Graphene Oxide(GO)  
 Crumpled GR/TiO<sub>2</sub> Crumpled Graphene(GR) TiO<sub>2</sub>  
 FE-SEM, XRD, BET  
 , Solar simulator  
 FE-SEM , Crumpled GR 가  
 가 가 Crumpled GR/TiO<sub>2</sub>  
 TiO<sub>2</sub>(P25) (12.88 mA/cm<sup>2</sup>)  
 (6.1%)